DeMont & Breyer Docket: 9771-015US Blumbach Docket: 04PH 0166USP K/nmo

## REMARKS

Claims 1-18 were presented for examination and were rejected.

Claim 12 was objected for the manner in which it recites the control device. The applicants have amended claim 12 to overcome this objection.

Claim 10 was rejected under 35 U.S.C. 112 for insufficient antecedent basis. The applicants respectfully traverse this rejection.

Claims 1, 6-7 and 12-14 were rejected under 35 U.S.C. 102(b) as being anticipated by cited references. The applicants respectfully traverse the rejections.

Claim 2-5, 8-11 and 14-18 were rejected under 35 U.S.C. 103(a) as being unpatentable in view of cited references. The applicants respectfully traverse the rejections.

The applicants respectfully request reconsideration in light of the amendments and the following comments.

#### **Claim Objections**

As stated in paragraph 1 of the Office action, claim 12 has been objected to because the claim recites that the control device is assigned to the first switching device (line 13), but then recited that the control device disconnects the second switching device (lines 17-18).

The applicants have amended claim 12, in order to recite that the control device is assigned to a <u>second</u> controllable switching device, as was assumed in the Office action. In view of this, the applicants submit that the objection of claim 12 has been overcome.

# 35 U.S.C. 112 Rejection of Claim 10

As stated in paragraph 3 of the Office action, claim 10 has been rejected under 35 U.S.C. 112, Second Paragraph, because the limitation "third output connection" lacks antecedent basis. The applicants respectfully traverse the rejection.

The applicants respectfully submit that claim 9 recites the limitation "third output connection" with an appropriate antecedent basis. Pertinent part of claim 9 recites:

"[...] a third output connection (140) which is assigned to the third controllable switching device (120) being arranged at a predetermined distance from the current-limited supply output (130)."

#### (emphasis supplied)

Since claim 10 is dependent on claim 9, the emphasized part of claim 9 provides the antecedent basis for "the third output connection" in claim 10. For this reason, the applicants submit that this particular rejection has been overcome.

Further, it is noted in the Office action that there is no limitation of a "second output connection" in any of the preceding claims. The applicants have changed in claim 9 the term "a respective second output connection" to" a second output connection", in order to clarify that a second output connection is recited.

## 35 U.S.C. 102 Rejection of Claims 1

As stated in paragraph 5 of the Office action, claim 1 has been rejected under 35 U.S.C. 102(b) as being anticipated by Nagai (US 6,057,609). The applicants respectfully traverse the rejection.

#### Claim 1 recites:

 A device for supplying uninterruptible power, said device comprising: input connections (90, 91) for connection to a primary DC voltage supply device (230);

connections (190, 191) for connecting a standby power source (60); first output connections (100, 101) for connecting a load (220);

a device (20) for decoupling the input connections (90, 91) from the first output connections (100, 101) in the event of a fault in the primary DC voltage supply device (230);

a first controllable switching device (40) for connecting the standby power source (60) to the first output connections (100, 101) in a controlled manner in the event of a fault in the primary DC voltage supply device; and

a control device (31) which is assigned to the first controllable switching device (40);

wherein:

# the first controllable switching device (40) has a power transistor (41, 42) which can be rapidly switched,

a monitoring device (30) is provided for the purpose of monitoring the output current flowing through the power transistor (41, 42) which can be rapidly switched, and

the control device (31) is designed to pulse-width-modulate the rapid power transistor (41, 42) on the basis of the current being monitored in order to limit the current which can be provided by the standby power source (60).

#### (emphasis added)

Nowhere does Nagai teach, alone or in combination with the other references, what claim 1 recites--namely, the first controllable switching device for connecting the standby power source to the first output connections.

The Office Action cites in parenthesis numeral 40 of Nagai as the first controllable device. Nagai in column 5 line 52 clearly states that numeral 40 is a DC-to-Dc converter. Nagai further states in column 6 line 11 onwards states that "..DC/DC converter 40 is further arranged by a diode 44 for rectifying an output voltage from this step-up transformer 43..". Clearly cited numeral 40 of Nagai represents a DC/DC converter and not the same as the first controllable switching device as taught by the claim 1. Furthermore, the Office Action alleges that item 42 of figure 5 of Nagai is same as the power transistor (41, 42) of the present application. The applicants respectfully submit that it appears from the teachings of the Nagai that item 42 of figure 5 of Nagai is rather a part of the DC/DC converter (40) (as shown in figure 4). The purpose of the item 42 is to participate in the DC/DC conversion action (as explained on col. 3 line 61-67, col. 6 line 5-15 and so on). In contrast, the present application teaches the power transistor (41, 42) which has at least the one objective (discussed in paragraph [007]) to prevent a current flowing to the standby power source (60) when primary power supply 230 is in operation.

At least for these reasons, the applicants respectfully traverse the rejection of claim 1.

### 35 U.S.C. 102 Rejection of Claims 1, 6-7 and 12-13

As stated in paragraph 6 of the Office action, claims 1, 6-7 and 12-13 were rejected under 35 U.S.C. 102(b) as being anticipated by Eng (US 4,745,299). The applicants respectfully traverse the rejection.

The Office Action cites the same reference numeral 453 of Figure 4 of Eng for both the first controllable device and the power transistor of the present matter. The applicants respectfully submit, that not only is the first controllable device of the present application different, in that the first controllable device has at least one diode and a transistor connected in parallel, but also Eng in column 4 lines 38-41 clearly states that numeral 453 is a ..."Darlington connected power switch whose switching is under control of base driver transistor 455...". This is <u>not</u> the case with the first controllable device of the present application. At least for this reason, the applicants respectfully traverse the rejection of claim 1.

Because claims 6 and 7 directly or indirectly depend from claim 1, the applicants respectfully submit that the rejection of them is also traversed.

With respect to claim 12:

**12.** A device for supplying uninterruptible power, said device comprising:

input connections (90, 91) for connection to a primary DC voltage supply device (230);

connections (190, 191) for connecting a standby power source (60); output connections (100, 101) for connecting a load (220);

a device (20) for decoupling the input connections (90, 91) from the output connections (100, 101) in the event of a fault in the primary DC voltage supply device (230);

a first controllable switching device (40) for connecting the standby power source (60) to the output connections (100, 101) in a controlled manner in the event of a fault in the primary DC voltage supply device (230); and

a control device (31) which is assigned to a second controllable switching device (22);

#### wherein:

a parallel circuit comprising a diode (21) and the second controllable switching device (22) forms the decoupling device (20), a monitoring device (30) is provided for the purpose of monitoring an input voltage, and the control device (31) disconnects the second controllable switching device (22) if the input voltage being monitored signals a fault in the primary DC voltage supply device (230).

#### (emphasis added)

Eng fails to teach at least "first controllable switching device", as discussed above and with respect to the Eng rejection of claim 1. For this reason, the applicants respectfully traverse the rejection of claim 12 as well.

Because claim 13 directly or indirectly depends from claim 12, the applicants respectfully submit that the rejection of claim 13 is also traversed.

#### 35 U.S.C. 103 Rejection of Claims 2-5

Claims 2-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai. The applicants respectfully traverse the rejection.

Claims 2-5 depend from claim 1, and the applicants have already traversed the rejection of claim 1 with respect to the 102 rejection in light of Nagai. Therefore, the issue

of whether Nagai teaches or suggests a rechargeable UPS is moot. For this reason, the applicants respectfully traverse the rejection of claims 2-5.

#### 35 U.S.C. 103 Rejection of Claims 8-11 and 14-18

Claims 8-11 and 14-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Eng in view of Stich (US 5,315,33) and Charych (US 4, 564,767). The applicants respectfully traverse these rejections.

Claim 8-11 depend from claim 1, and both Stich and Charych fail to cure the deficiencies of Eng with respect to the already-discussed rejection of claim 1 in light of Eng. Therefore, the applicants respectfully traverse the rejections of claims 8-11 as well.

With respect to claim 14:

**14.** A device for supplying uninterruptible power, said device comprising:

input connections (90, 91) for connection to a primary DC voltage supply device (230);

connections (190, 191) for connecting a standby power source (60);

first output connections (100, 101) for connecting a load (220);

a device (20) for decoupling the input connections (90, 91) from the output connections (100, 101) in the event of a fault in the primary DC voltage supply device (230);

<u>a first controllable switching device (40) for connecting the</u> <u>standby power source (60) to the output connections</u> (100, 101) in a controlled manner in the event of a fault in the primary DC voltage supply device (230);

a control device (31) which is assigned to the first controllable switching device (40); and

a supply output (130) which is connected in parallel with the first output connections (100, 101) and whose current is limited by a current limiter (110).

#### (emphasis added)

Nowhere does Eng, Stich or Charych alone or in combination, teach "first controllable switching device", as discussed above. For this reason, the applicants respectfully traverse the rejection of claim 14.

Because claims 15-18 directly or indirectly depend from claim 14, the applicants respectfully submit that the rejection of them is also traversed.

# Request for Reconsideration Pursuant to 37 C.F.R. 1.111

Having responded to each and every ground for objection and rejection in the last Office action, applicants respectfully request reconsideration of the instant application pursuant to 37 CFR 1.111 and request that the Examiner allow all of the pending claims and pass the application to issue.

If there are remaining issues, the applicants respectfully request that Examiner telephone the applicants' attorney so that those issues can be resolved as quickly as possible.

Respectfully, Hartmut Henkel et al.

#### By /Jason Paul DeMont/

Jason Paul DeMont Reg. No. 35,793 Attorney for Applicants 732-687-7990

DeMont & Breyer, L.L.C. Suite 250 100 Commons Way Holmdel, NJ 07733 United States of America